

EXHIBIT E

**MADISON COUNTY
MINES
MISSOURI
EPA ID# MOD098633415**

**EPA Region 7
City: Fredericktown
County: Madison County
Other Names:**

03/26/2010



SITE DESCRIPTION

The Madison County Mines Project is located in southeastern Missouri near Fredericktown in the Old Lead Belt where heavy metal mining has occurred since the early 1700s. Past mining operations have left at least 13 major tailings and chat deposits from mineral processing operations within the county. Additionally, there may be other piles or locations where these deposited materials have been placed. These materials may have been moved by erosion, both wind and water, or relocated by other means to other locales throughout the county. The tailings and chat contain elevated levels of lead and other heavy metals which pose a threat to human health and the environment. In addition, these deposits have contaminated soils, sediments, surface water, groundwater, and are impacting ecological systems. Throughout the area, sensitive populations (young children, pregnant women, and senior adults) continue to be exposed to these contaminants.

Site Responsibility:

The site is being addressed through federal and potentially responsible party actions.

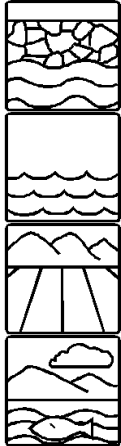
NPL LISTING HISTORY

Proposed Date: 04/30/2003

Final Date: 09/29/2003

Deleted Date:

THREATS AND CONTAMINANTS



Contaminants currently being investigated and ultimately addressed include heavy metals resulting from the mining and processing of ore throughout the county. In particular, exposure to lead can represent a significant risk to the health of young children, pregnant women, and the elderly, as well as a risk to the environment. The media being evaluated and addressed include: chat and tailings piles; residential yards; public areas; drainage ways; road, street, and highway right-of-ways; groundwater; surface water; and sediments.

CLEANUP APPROACH

Response Action Status



Initial Actions: Time-critical removals for soils exceeding 1200 ppm lead was implemented in 2003. By the end of 2008, approximately 3,000 homes had been sampled for lead contamination with approximately 852 residential property soils determined to be at or above the removal action level and over 800 residential properties had been cleaned.



Site Studies:

- Characterization Summary Draft to determine the presence, concentration, and extent of heavy metal contamination was completed in 2000 at Operable Unit #1 (OU-1) located in the northern portion of the site by Potentially Responsible Parties (PRPs) with oversight by EPA.
- Baseline Ecological and Human Health Risk Assessments have been completed to cover the majority of the site.
- A Remedial Investigation (RI) which covers OU-3, OU-4, OU-5, and OU-6 was completed in 2008.
- A Feasibility Study (FS) for the residential properties across the county for OU-3 was completed in 2008. A Proposed Plan was presented to the public for comments and a remedy was selected with an Interim Record of Decision signed in 2008.
- A Feasibility Study (FS) was drafted in 2009 for OU-4. The report will be incorporated into a Focused Feasibility Study in 2010 to cover all operable units

with exception of OU-3 which will be covered under a future RI/FS.

-An Amendment to the Baseline Ecological Risk Assessment was conducted for OU-5 in 2009.

-A Remedial Investigation/Focused Feasibility Study (RI/FFS) is being implemented in 2010 for OU-1, OU-2, OU-3, OU-4, and OU-5 to address mine chat and tailings.

Site Facts: In 1999, approximately 16% of the children tested in Madison County had blood-lead levels greater than 10 ug/dl, the level of health concern for EPA and its partner, the Agency for Toxic Substances and Disease Registry. In 2005, that percentage had decreased to 6%, due to the removal and replacement of lead-contaminated residential soil by the Superfund Removal Program and EPA-funded lead health education provided by the Madison County Health Department. American Recovery and Reinvestment Act funding was provided for the site in 2009 resulting in the employment of many local citizens. The site also received a settlement in 2009 from the ASARCO bankruptcy.

ENVIRONMENTAL PROGRESS



Two time-critical removal actions were completed in October 2006. These removals cleaned up properties where lead-contaminated soils were creating an unacceptable risk to young children. A Proposed Plan for remedial alternatives was presented for public comment in 2008 resulting in the selection of a remedy and completion of the Interim Record of Decision (ROD) for residential properties. The remedy also includes a Health Education Program and a Voluntary Institutional Control Pilot Program being implemented through two state cooperative agreements executed with the State of Missouri Department of Health and Senior Services to be administered through the Madison County Health Department. Over 1,000 residential properties were remediated by the end of 2009 with the assistance of funding provided through the American Recovery and Reinvestment Act (ARRA). Residential screening continues for the remaining estimated 950 residences which have not been previously screened to identify properties requiring cleanup. A Remedial Investigation/Focused Feasibility Study is planned for completion by 2011 for operable units with chat and tailings piles. ASARCO bankruptcy settlement money will be used to expedite the cleanup of mine wastes considered the biggest risk to human health and environment.

COMMUNITY INVOLVEMENT

A Community Involvement Plan serves as a support vehicle at this site, defining "who, what, when, where, and why" EPA has a presence in Madison County. The Madison County Environmental Roundtable was established as a dialogue forum for EPA, health officials, state representatives, elected officials, and local interested persons. This group has remained active since its formation and typically meets every other month. EPA also has a toll-free telephone number for the Regional Office in Kansas City, Kansas to give the public easy access to site representatives. There is also a Health Education Plan and a Voluntary Institutional Control Pilot Project funded through two state cooperative agreements between EPA and the Missouri Department of Health and Senior Services to be administered by the Madison County Health Department as part of the Interim Record of Decision for OU-3. These state cooperative agreements were approved in 2009 and are currently under development.

SITE REPOSITORY



Fredericktown Branch of the Ozark
Regional Library
115 South Main Street
Fredericktown, Missouri 63645
573/783-2120
Debby Anderson - Librarian

Superfund Records Center
901 N. 5th St.
Kansas City, KS 66101
Mail Stop SUPR
(913)551-7166

REGIONAL CONTACTS

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COMMUNITY INVOLVEMENT

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MISCELLANEOUS INFORMATION

STATE:

CONGRESSIONAL DISTRICT:

EPA ORGANIZATION:

MO
0701102
Missouri 5th
SFD-

MODIFICATIONS

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Lynette
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